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Conference Abstract

Exploring Ethics in Museum Pest Management

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Abstract

Integrated Pest Management (IPM) has been widely employed as an effective method to control or eliminate pest populations within museum collections (Pinniger and Crossman 2021). IPM emphasizes the use of targeted treatments and pesticide alternatives including low temperature, oxygen reduction, or replacement with gasses such as nitrogen, and species-specific lures on sticky traps. These treatments, combined with routine inspections, monitoring, good housekeeping, and exclusion create a more holistic and less toxic environment for the museum's collections and people. But what about the pests themselves? The definition of a "pest" varies within each industry and it is paramount to consider ethical standards when implementing a pest management program not just for the environment and people, but for the animals targeted. Efforts have been made to minimize harm to rodents and other mammals deemed "pests," such as banning certain poisons and using catch-and-release methods, but less consideration has been made for insects and arachnids. This talk explores ethics in museum IPM practices to foster a better understanding of our relationship with these living beings.

For any museum collection, a primary objective is to limit the potential economic and health risks to the objects under their stewardship and care. The implementation of simple routine practices emphasizing preventive care, works to mitigate the risk of pest entry while deterring the need for more widespread, expensive, and time-consuming methods of pest management. Currently, standard pest monitoring practice employs sticky monitors that are thinly coated with glue and set out in collections storage and galleries to trap and observe potential pest insects. In most cases, any trapped being is killed. While there is, as of yet, no successful replacement for this monitoring system, the

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sustained practice of IPM with ethical considerations lessens the inopportune demise of insects, arachnids, and small mammals deemed pests.

When considering ethics in pest management, there is the question of *value*. What value do "pests" have? As posited by Michael L. Draney in *Ethical Obligations Toward Insect Pests*, considering pest insects as individuals limits the development of sustainable and functional ethics for pest management. However, Draney does argue that insect populations are worthy of ethical consideration (Draney 1997). Building on these principles, I believe there is space in pest management to control these populations, protecting our collections, while recognizing the value of these beings and mitigating their suffering.

The IPM methods that can help us achieve the goals of protecting museum collections while incorporating an ethical approach to pest management are: prevention, exclusion, and potentially, repellents. The first method, prevention, is the effort to keep pests out, and serves as the foundation and ethical cornerstone for IPM. Prevention is strongest when paired with exclusion, the active discouragement of pest entry. Exclusion aims to keep living beings—other than humans—outside, where they are not pests. This includes reducing entry points from outside the museum, vacuuming exit routes and hallways, organizing a committee of multiple departments tasked with finding collaborative methods of achieving exclusion and integrating pest management into the fundamentals of exhibition design.

A commitment to exclusion marks a significant undertaking: it cannot be done alone. There must be a community of people who believe and steward the effort from within, not just individual professionals and volunteers. This is, perhaps, the most significant obstacle faced by a policy of exclusion: obtaining the buy-in and commitment to approaches centered around striking a new balance for IPM between economic expediency and the protection of the collections in question. Non-hazardous and non-invasive pest management is not just beneficial for the health of pests, but also that of museum workers and visitors. Many pesticides used in collections are effective at killing pests while being toxic to humans and the environment. For the health of the collections, humans, and pests, employing preventive methods such as housekeeping, exclusion, and potentially natural repellents reduces the pest's opportunities for entering the museum (Brennan and Moreau 2019).

Integrated Pest Management is a well-established and successful practice for collections care. The suggestions above require us to shift our focus from protecting our items at the expense of other beings to more inclusive approaches. This abstract does not aim to say anything particularly radical regarding IPM, but rather to support the simple and practical use of preventive measures and ethical considerations that benefit our institutions and bugs.

Keywords

pest control, bugs, IPM

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Conflicts of interest

The authors have declared that no competing interests exist.

References

- Brennan J, Moreau LA (Eds) (2019) Our Ancestors Knew Best: Traditional Southeast Asian Textile Treatments and Their Place in Modern Conservation. SEAMEO SPAFA and QSMT URL: https://publications.spafajournal.org/index.php/spafapub/catalog/book/35
- Draney M (1997) “Ethical Obligations Toward Insect Pests". Ethics and the Environment 2 (No. 1): 5-23. URL: https://www.jstor.org/stable/27766028
- Pinniger D, Crossman A (2021) Integrated Pest Management: A Holistic Approach to Managing Pest Damage to Cultural Assets. URL: https://www.icm.works/wp-content/uploads/2021/05/Intro-to-IPM_FINAL_080520211.pdf